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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------|-------------|----------------------|---------------------|------------------|
| 10/806,225 | 03/23/2004 | Hans Ulrich Frutschi | 61277-0011 | 1759 |
| 27890 | 7590 | 08/29/2005 | EXAMINER | |
| STEPTOE & JOHNSON LLP | | | GARTENBERG, EHUD | |
| 1330 CONNECTICUT AVENUE, N.W. | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20036 | | | 3746 | |

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,225

Applicant(s)

FRUTSCHI ET AL.

Examiner

Ehud Gartenberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The amendment filed 7/25/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows (see p. 4, ll. 18-24): the graded increase of the available flow cross section in the individual stages of the turbine.

Applicant is required to evaluate this amendment and decide what is the invention as disclosed and as claimed. While on a first reading it appeared that the disclosure as filed contained an error, a second look revealed that the disclosure may have been ambiguous about its teaching, and presently it is not clear what said statement teaches.

One way to interpret the invention as conceived in light of the disclosure is that the available flow cross section of a multi-stage turbine (any turbine) is gradually increased. This interpretation follows the conventional practice of turbines, would not define over the prior art, and this may be the case of the amended increase in cross section area of Claim 16.

However, a second interpretation of the invention is that multi-stage gas turbines designed for air and adapted for operation with a medium that is different from air have individual stages of reduced cross-section area, however the degree of reduction in the cross-section area of the individual stages is gradually reduced in the downstream

direction relative to the same gas turbines as originally designed and operated with air. The original text-description as filed was not clear on this point (as the first office action pointed out in its objections and rejections), and the amendment that was filed on 7/25/2005 created the impression that it was filed in order to obtain a patent in an expedient way. However, a closer inspection of the data in Table 1 indicates that although there is an increase in the cross section area of the stages in the downstream direction, the degree of reduction of the area (NOT the area, but the REDUCTION OF THE AREA) DECREASES in the downstream direction. For example, referring to line 1 of Table 1, the reduction in area of the 1st stage is 24% and the reduction in the area of the 5th stage is 0%. Because this "increase" or "decrease" teaching is understood to be THE most relevant limitation in this invention, Applicant is required to review the Application, and decide what IS the substance of the invention, then to properly and unambiguously and clearly disclose it, and then claim it accordingly. It appears that this invention would more properly be claimed as "method of making" rather than as an apparatus, because the steps involved in the transformation of the gas turbine will be given little patentable weight. In addition, regardless of how Applicant will choose to disclose and claim the present invention, he will have to prove that he owned the invention at the time of the filing. It is not clear whether this confusion arose as a result of the translation, or confused initial disclosure, or an amendment that should not have been made.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As explained detail in the objection to the disclosure, it is not clear at this point whether the enablement is for a graded increase in the cross sectional area of the turbine stages, or a graded decrease in the reduction of the area of turbine stages relative to a turbine designed for use with air, i.e., the highest reduction in the first stage and the lowest reduction in the last stage.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For the reasons discussed above, the meets and bounds of the claims are not clear.

Conclusion

6. The condition of the disclosure precludes a complete examination and application of the prior art. However, to the extent that the invention could be understood, a search of the prior art has been conducted and the references cited in the attached USPTO Form 892 are believed to be the most relevant.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

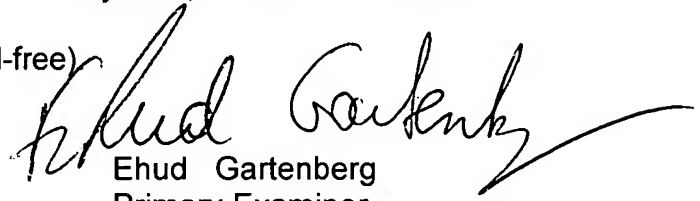
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ehud Gartenberg whose telephone number is 571 272 4828. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on 571 272 4444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ehud Gartenberg
Primary Examiner
Art Unit 3746

08252005